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ABSTRACT

A study was conducted to examine factors affecting the success of Chicano students in achieving their educational and career goals. The study assessed the relationship between student-related variables (e.g., student characteristics and educational and career goals prior to community college enrollment); college-related variables (e.g., student/institution interactions and Chicano collective consciousness); student objective attainment (i.e., institutionally defined outcomes such as credits and degrees earned); and student subjective attainment (i.e., individually defined outcomes including perceptions of goal attainment and satisfaction). A 46-item survey instrument was sent to 1,786 Chicano students enrolled at three south Texas community colleges. Study findings, based on a 24% response rate, included the following: (1) students who attended a two-year institution because of fear of rejection at a four-year school tended to have less subjective attainment; (2) students with vocational/technical goals reported less satisfaction with their educational goals; (3) students who maintained their goals reported better subjective attainment; (4) student background characteristics appeared to indirectly influence the type of credential earned; and (5) high school achievement and father's work status had the most significant effect on credential attainment. (HB)

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CHICANO STUDENT AND INSTITUTION
RELATED DETERMINANTS OF EDUCATIONAL OUTCOMES
IN SOUTH TEXAS COMMUNITY COLLEGES

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CHICANO STUDENT AND INSTITUTION
RELATED DETERMINANTS OF EDUCATIONAL OUTCOMES
IN SOUTH TEXAS COMMUNITY COLLEGES
by Laura I. Rendón, Ph.D.

The Problem

As of date, the controversy over what community colleges actually do for minorities is divided into two sectors. Critics indict two-year colleges for ill-serving minorities, for tracking them into less than collegiate level studies, and for reducing their chances to earn baccalaureate and higher degrees. For example, the recent Final Report of the Commission on the Higher Education of Minorities (1982) indicates that two major factors contribute to the severe underrepresentation of Chicanos and other minorities in upper levels of baccalaureate higher education: "(1) their extremely high rate of attrition from secondary school and (2) their greater than average attrition from under-undergraduate colleges (particularly community colleges)" (p.17). Further, mounting evidence appears to indicate that community college Hispanic students transfer to four-year institutions less often, have lower persistence rates and achieve lower baccalaureate completion rates than their white counterparts (NCES, 1980; CHEM, 1982; Olivas, 1979, Astin, 1982).

On the other hand, defendants idealize community colleges as the epitome of equal opportunity and point to the fact that these institutions offer minority students a choice between some kind of college education and nothing (Cohen and Brawer, 1982). Academically ill-prepared students as well as those with limited

financial resources are most prone to avoid applying to four-year institutions with tough admission standards and expensive tuition and academic services. The two-year college has sealed its place in the spectrum of higher education through its flexible design and fluid philosophy, thus attracting and serving a heterogeneous group of students from diverse socio-economic, ethnic and ability backgrounds. To be sure, open admissions, proximity to home, convenience and low cost have lured Chicanos, other minority and low SES students to attend two-year colleges in disproportionate numbers, compared to four-year institutions (Crossland, 1971, Olivas, 1979; Karabel and Astin, 1975). For example, in 1980 only 36% of white students were enrolled in two-year colleges compared to 54% of Hispanic students (Magallan, 1983). Given this disproportionate breakdown of Hispanic student enrollments by institutional type, there is a serious concern with data which appears to indicate that access into two-year colleges has not been equally matched by Chicano student persistence and achievement of educational goals (Astin, 1982; CHEM, 1982; Olivas, 1979; NCES, 1980).

It is well known that the quantification of educational progress for two-year college students is a complex undertaking. For example, many students classify themselves as "college transfer" when in reality they have no interest in transferring to a senior institution. Further, many students are known to transfer between institutional types and among colleges of each type at different points in their college careers. Moreover, some students attend two-year colleges for diverse needs and objectives. An educational goal may be achieved by taking one or two courses as well as by taking a

varied number of courses which lead to an associate degree.

Yet, it is difficult not to indict two-year colleges when the Commission on the Higher Education of Minorities (1982) indicates that although three-fourths of community college entrants indicate that they intend to work towards a bachelor's degree, their chances of actually transferring and completing the baccalaureate degree at a senior institution are quite slim. The Commission states: "Even after taking into account their generally poorer academic preparation, one finds that regardless of race and ethnicity, community college students are substantially less likely than four-year college entrants to complete four undergraduate years" (p.16). Indeed, the Commission reveals that approximately 56% of white freshmen compared to 51% of black, 42% of Puerto Rican, 40% of Chicano and 39% of American Indian eventually receive a bachelor's degree (CHEM, 1982).

To what extent does the community college perpetuate inequities in access and educational achievement for Chicanos and other minority students? Does the primary fault for student attrition and subsequent failure to achieve educational goals lie with the institution, or are minority themselves responsible for their faltering track record in higher education? The answer to the issue of access versus outcomes is critical to Chicano student populations. Not to resolve the issue is to perpetuate an intergenerational cycle of social and educational inequities. Poor Chicano participation in higher education seriously restricts occupational and social mobility and deprives this student cohort from a true opportunity to become a productive member in an American society.

Conceptual Framework

The basic premise underlying the framework for this study is that the success or failure of Chicano students in achieving educational and career goals is dependent on multiple variables. Some of these variables are related to student background characteristics while others may be attributed to the interaction of the student with the collegiate environment. Thus, an individual student's progress toward achievement of desired outcomes may be viewed as a product of prior interaction with society and culture and present interactions with the society and culture characteristic of an organized institutional system. When individual student acculturation to social institutions is viewed in this manner, a branch of social behaviorism theory known as "symbolic interaction theory" offers particular applicability to the development of this study.

"Symbolic interaction theory is concerned with the influence of society and culture upon the individual and, in turn, the influence of the individual upon society and culture" (Alfred, 1972, p. 35). An individual may be said to both influence and be influenced by society and culture. Thus, the relationship between the individual self and society is critical in symbolic interaction theory.

Symbolic interaction theory explains the character of interaction between the self and significant others. Individual development is influenced through a socialization process whereby individuals interpret symbols and internalize the attitudes of significant others who hold desirable referents for behavior and actions.

Therefore, it is possible that individual development can be affected by external factors inherent in the society, culture and in institutional systems. Individual modes of action are determined by the interpretation and internalization of relevant, desirable behaviors and attitudes from significant others.

Research Model

The research model used in this study has three basic components: student-related, college-related and student outcome variables. Student-related variables include background variables such as individual student characteristics and student choice of educational and career goals which are formed prior to student enrollment in community college. College-related variables are comprised of interaction variables including student-institution interactions and Chicano collective consciousness, which may be viewed as determinants of student educational outcomes in relationship to student interactions with the college environment (i.e., following initial enrollment of students in college). Outcome variables are of two types: 1) objective attainment, i.e., institution-defined outcomes including total number of college hours earned and type of credential earned, and 2) subjective attainment, i.e., individually defined outcomes including individual perceptions of extent of goal attainment as well as perceptions of satisfaction with goal attainment.

Method

The study employed a cross sectional design and was begun in May 1981 with a random sample using a population base of Chicano students who enrolled full-or part-time for the first time in the

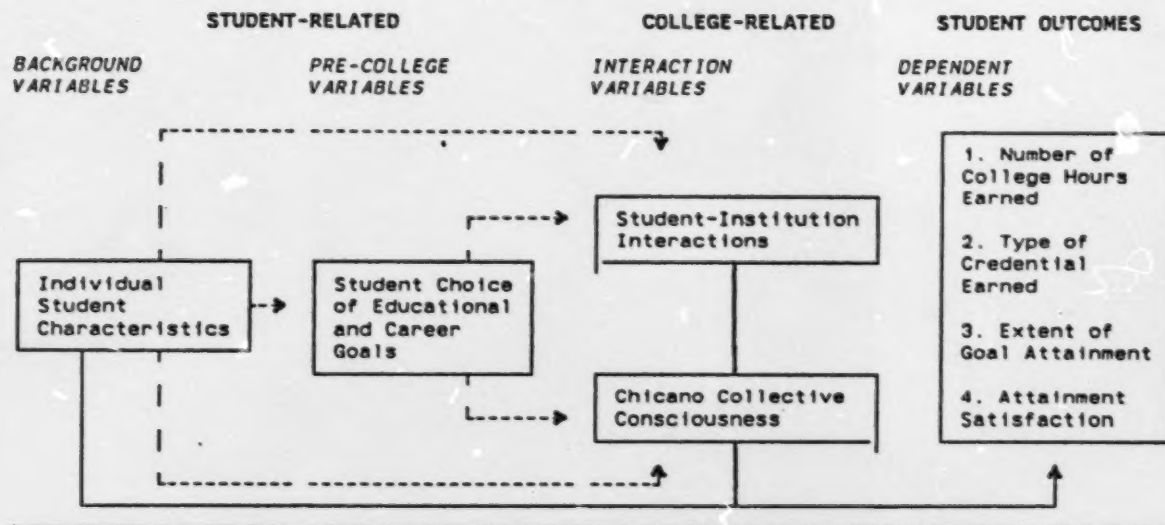


FIGURE 1
RESEARCH MODEL

Fall of 1977 or 1978 in one of the three South Texas Community Colleges: 1) Laredo Junior College (Laredo); Texas Southmost College (Brownsville); and Del Mar College (Corpus Christi). Chicano students were identified on the basis of two criteria: 1) United States residency at the time of enrollment and 2) itemization under the ethnic category, Hispanic, on the official college roster. A 46-item survey instrument was sent to a random sample of 1786 Chicano students. Follow-up procedures were employed based on a systematic two-phase sampling technique (Kish, 1965), resulting in a sample size of 227 students and yielding a response of 23.71% derived from adding proportions of the first plus the second and third subsamples. Statistical techniques such as factor analysis, Pearson Product Moment Correlation Coefficients and dummy variables were used to reduce data. Significant direct and indirect effects of predictor variables on each dependent measure were determined through multiple regression analysis. (See Models, Appendix B-F).

The research design employed has two major limitations. One is the low response rate which is typical for minority student surveys and which precludes determining whether respondents are representative of the entire population. Second, the sample taken from the three colleges is not characteristic of the entire Southwest or other geographic region where Chicanos may be found.

Results

Individual Student Characteristics x Educational Outcomes

No single student background measure had a significant direct effect subjective attainment. However, some of these measures directly influence college hours earned and credential attainment. College hours earned appear to be directly related to family SES

and age. Older Chicano students and those from low SES backgrounds, tend to earn fewer college credit hours. Students with evidence of good high school achievement records as well as students whose fathers work outside the home also tend to earn more college credit hours. Males tend to earn more credit hours than females.

The two most powerful direct effects of background variables on credential attainment are high school achievement and father's work status. Chicano students with good high school achievement records and those whose fathers work outside the home tend to earn AA degrees and above.

Educational Goal Selection x Educational Outcomes

Two measures related to Chicano choice of educational goals appear to influence subjective attainment measures. Students who attend a two-year institution because of fear of rejection at a four-year college tend to have less subjective attainment. Similarly, students with a vocational-technical goal report less satisfaction and accomplishment with their educational goals.

Goal measures related to hours earned indicate that students who aspire to academic-related credentials, majors and occupations as well as those with strong goal commitments tend to earn more hours. This same pattern is observed in the pattern leading to credential attainment. In this pattern, students with strong goal commitments as well as students who aspire to academic-related credentials and who want more than a four-year education, also tend to earn AA degree and above.

Student Institution Interactions x Educational Outcomes

Two types of student-institution interactions appear to directly

influence subjective attainment. It appears that students who do not change their goals tend to report better subjective attainment, suggesting that the identification of educational goals early in a student's career can lead to positive perceptions of subjective attainment. Positive perceptions of program services appear to lead to positive feelings of subjective attainment, suggesting that community college program services are important for Chicano students.

Internal encouragement is the only student-institution interaction measure which appears to be significantly related to hours earned. Students who receive high degrees of internal encouragement from community college faculty, counselors and administrators also tend to earn more hours. This finding is in keeping with earlier studies that indicate that faculty contact is a key factor which contributes to student persistence and educational goal commitment (Pascarella & Terenzini, ab).

Two types of student-institution interaction measures appear to influence credential attainment. Students who do not change their goals often tend to earn AA degrees and above, suggesting that early arrival at a clear, defined goal is important not only for credential attainment, but for subjective attainment. Interestingly, Chicano students with basic skills problems also tend to earn higher credentials, indicating that they may have improved their basic skills deficiencies during community college enrollment. The later finding points to an apparent importance which community colleges may have in advancing high-risk students with basic skills needs toward educational goal completion.

Chicano Collective Consciousness x Educational Outcomes

No single Chicano collective consciousness measure significantly affects subjective attainment. However, individual system blame is related to college hours earned. System blamers who believe systems, not individuals are primarily responsible for social and educational inequities also tend to earn more hours. Further,, credential attainment appears to be related to ethnic association. Students who associate with staff and peers of their own ethnic group tend to earn higher credentials, indicating that for Chicano students, this type of ethnic association contributes to social integration, which, in turn, leads to educational goal attainment.

Combined Student-and College-Related Variables x Educational Outcomes

When indirect effects on each dependent measure are examined, it is possible to arrive at combined influences of predictor measures on educational goal attainment. Student background characteristics such as family SES, high school achievement and father's work status indirectly influence the number of college hours earned and the type of credential earned through their influence on student choice of academic-related goals. Students from high family SES backgrounds, with good high school achievement and those whose fathers work outside the home tend to select academic related institutional types, majors and occupations. Conversely, combined findings indicate that hours earned and credential attainment are affected indirectly by family SES and high school achievement through the aspirations of non-academic related educational goals or electing to attend a two-year college for the reason of wanting less than a four-year education. Students with low family SES backgrounds, and those with poor high school achievement tend to select non-academic goals

and are more likely to attend a two-year college for less than a four-year education.

A pattern that did not emerge for number of college hours earned or credential attainment is observed for subjective attainment. Perceptions of goal accomplishment and satisfaction appear to be indirectly influenced by age, prior encouragement and goal commitment through perceptions of program services. Older students, those who received high degrees of encouragement to go to college and those with strong goal commitments tend to have positive perceptions of program services.

An interesting pattern where internal encouragement had mediating effects is observed only for hours earned. Three factors influence internal encouragement and thus indirectly influence total college hours earned. Students with high degrees of prior encouragement to go to college, those whose fathers work outside the home as well as those with high degrees of goal commitment tend to receive high degrees of internal encouragement. The mediating effects of system blame are also observed only for hours earned. Individual system blame is influenced by family SES and student aspirations to initially enroll in an academic-related institution and thus indirectly influence total college hours earned. It is interesting to note that students with low SES backgrounds as well as those who initially aspired to enroll in institutional types which would prepare them for academic professions tend to be system blamers who believe systems, not individuals, are primarily responsible for social and educational inequalities. This finding is in keeping with Gurin and Epps' (1975) study which indicates that Black students who tend to be system blamers were also high achievers.

A final salient finding which emerges only for credential attainment is the mediating effects of ethnic association. In this study, five factors influence ethnic association and thus indirectly influence credential attainment. Chicano students from low SES backgrounds as well as those who have strong goal commitments tend to associate with members of their own ethnic group. Likewise, Chicano students who attend a community college based on a weak determination, or fear rejection at a four-year college tend to associate with members of their own ethnic group. Conversely, students who selected two year college based on a home/program attraction tend to associate with members not their own ethnic group and a combination of their own and not of their own ethnic group.

Conclusions: Portrait of a Successful Chicano
Community College Student

The findings derived from this survey may be summarized to arrive at a portrait of the successful Chicano community college student as defined by high degrees of objective and subjective attainment. Study findings indicate that the Chicano students who most likely achieve their educational goals are males, tend to have a high family SES, come from homes with working fathers, possess good high school achievement records, and receive high degrees of prior encouragement to go to college from parents, friends, relatives and high school teachers and counselors. Further, successful Chicano students tend to aspire to academic-related credentials, majors and occupations as opposed to vocational-technical goals. Successful Chicano community college students have strong goal commitments and are not worried about rejection at a four-year college. These students tend to have early, well-defined educational

goals and tend to perceive the college's academic, social, career and ethnic programs positively. Successful Chicano students tend to receive high degrees of internal encouragement to assist them to continue their college careers from community college teachers, counselors and administrators. Perceiving systems and not individual members of their own group as primarily responsible for social and educational inequities is a special kind of externality for some Chicano students. For some high achieving Chicano students in community colleges, system blame may indicate that these individuals recognize system constraints such as discrimination and prejudice which have restricted the educational and occupational advancement of the cultural group. Further, a healthy focus on system obstacles may enable Chicano students to distinguish system opportunities such as the potential of social mobility through the acquisition of career skills in higher education. Thus, an external orientation may prove to be a motivational asset for Chicano students who view their educational success as a means to upgrade the collective status of their own ethnic group.

Practical Applications

Since Chicano students appear to be electing to enroll in two-year colleges in disproportionate numbers (Garcia, 1980; Olivas, 1979) it is important that two-year college re-assess their role in terms of the student clientele they are serving. In particular, community colleges should take a very close look at their own data regarding student persistence and achievement and distribution of minorities across program types. Institutional research is essential to determine an individual institution's success at retaining students and at advancing them toward fulfillment of their stated educational goals. It is also necessary to assess whether or not students from

low SES backgrounds are being "tracked" into vocational-technical programs and to identify ways and means to assist them to identify and achieve their educational goals as well as to enhance their perceptions of satisfaction and accomplishment.

In this study, one of the key factors contributing to Chicano educational goal attainment is internal encouragement given by faculty, counselors and administrators. Similarly, the literature indicates that contact with faculty is a critical element contributing to student persistence (Pascarella & Terenzini, 1979 ab; Ramist, 1981; Tinto, 1975). It would seem important that community college faculty and counselors who, by their very nature, have the opportunity to come into contact with students on a day-to-day basis, extend the opportunities to meet with Chicano students outside of class. One solution might be the implementation of a faculty advisement program where students (including those who intend to transfer and those with vocational-technical goals) would be able to meet with faculty members on a regular basis regarding their program of study. Also, faculty could be included as part of a support staff in developmental studies labs to work with students with basic skills problems. Further, student contact with counselors could be increased if counselors provided weekly or bimonthly seminars on topics such as career awareness and development of study skills. Students might attend these sessions voluntarily or be referred by a faculty member.

A positive move toward improving student persistence and goal achievement would be to involve the entire community staff in an action-oriented student retention program. Noel (1978) provides a useful model for activating such a program. According to Noel's

model, a campus-wide retention committee would be set up as the guiding mechanism to promote activities such as determining the campus dropout rate, making faculty and staff aware of factors related to retaining students, and building recruitment, orientation, counseling and career programs (Noel, 1978).

Another important study finding is that Chicanos who associate with members of their own ethnic group tend to receive higher college degrees. The importance of this finding is underscored with the observation that this is true even for students who attend a two-year college on the basis of a weak determination or because they fear rejection at four-year colleges. The implication of these findings is that Chicano students and staff constitute a viable support system which contributes to social integration and institutional affiliation, the necessary ingredients for persistence. The hiring of Chicano faculty, counselors and administrators who are cognizant to culturally diverse student needs is critical to the retention process. In addition, the elements of social integration and affiliation may be enhanced by maintaining a program of extra-curricular activities, including ethnic-related programs where Chicano students can interact with their peers as well as with other significant members of the college staff.

Chicano student persistence and attainment of educational goals may be enhanced through the incorporation of the institutional research function with the teaching and counseling functions. Specifically, the Office of Institutional Research could collect data and organize a computer based student management information system. This MIS could include variables such as student background characteristics (sex, age, family SES, high school GPA,

high school rank, etc.) and stated educational and career goals. Using this data base, the Office could develop a profile of the entering freshman class which would be made available to faculty and counselors.

Data from this Office could be provided to faculty members who need a student profile in specific classes. The faculty could use this profile to develop a student needs assessment which would then be the basis for developing a course syllabus. Similarly, a counselor could obtain information about individual students in terms of background characteristics and goals in order to assist students with career and academic advisement. Further, the college could maintain a current student retention record with student-specific data including a course-by-course, semester-by-semester or year-by-year account of student withdrawals and reasons for withdrawals. Also, it would be possible to identify withdrawal prone students so that a computer-generated, personalized letter could be sent to students asking them to see a counselor. It is only lately that community colleges have started to move into the domain of computer management information systems. The effective use of this type of MIS is limited only by individual creativity. A well-developed MIS could be an invaluable aid to colleges to assist them to determine the success they have in serving students as well as to intervene in the learning and persistence processes of the students they serve.

A final important aspect to educational goal achievement for Chicano students is external system blame. It is important that community college professional staff recognize that for some Chicano students, externally oriented perceptions of system blame for social and educational inequities may be healthy and realistic. These

students may be aware of opportunities and constraints within a social system and have a strong desire to succeed in order that they may help other members of their ethnic group to overcome system-related obstacles to achievement and upward mobility. Counselors and faculty who deal with these students should provide the necessary guidance and encouragement to assist these students with their progress at achieving their educational goals.

This present study had indicated that Chicano student's educational outcomes have multiple causes and antecedents. Clearly, the process of student progress towards educational goal achievement is a dynamic and complex process. The research reported should be considered exploratory at best and future studies should be conducted perhaps using a longitudinal design with path analysis and larger sample sizes using different cohorts of Hispanic students throughout the nation. Validation of the findings presented here can only occur through further investigations of educational issues pertaining to Chicanos in higher education.

APPENDIX A

DESCRIPTIVE FINDINGS OF HISPANIC STUDENTS WHO BEGAN ENROLLMENT IN
THREE TEXAS COMMUNITY COLLEGES IN 1977 OR 1978; 56% FEMALE, 43% MALE
N = 227

- I. Prior encouragement to go to college provided by
 - A. Mothers (67%)
 - B. Fathers (64%)
 - C. Least encouragement came from high school teachers (27%)
- II. Parent SES
 - A. Mean number of school years completed by mother = 8.6
 - B. Mean number of school years completed by father = 9.0
 - C. Mean income = \$12,500
 - D. 83% had working fathers; 32% had working mothers
- III. Reasons cited for attending community college over four year college:
 - A. Cheaper
 - B. Stay close to home
 - C. Work while study in home town
 - D. "Try Out" college work
 - E. Good college academic reputation
 - F. Good program in major field take courses for self-improvement
 - G. Received no encouragement to go to a four-year college
- IV. Most Important Educational Goal
 - A. Academic
 - B. Vocational-Technical
 - C. Personal Development
 - D. Material
 - E. Affiliative
 - F. Cultural/Familial
- V. Internal Encouragement
 - A. Only one-third (35%) met with faculty outside of class two to three times a week or more
 - B. 60% met with counselors only at registration
- VI. Most Serious Problems Experienced at Community College
 - A. Basic skills problems
 - B. Difficulty developing proper study habits and utilizing time
 - C. Uncertainty about career objective
 - D. Doubts about the value of obtaining a college degree
- VII. Objective Attainment - Fall 1977 to Spring 1981
 - A. Mean credit hours = 68
 - B. No degree or only one-year certificate = 39%
 - C. Associate degree in progress = 27%
 - D. Earned Associate degree = 11%
 - E. Earned BA or had BA in progress = 23%
- VIII. Subjective Attainment
 - A. Believed achieved all original goals = 59%
 - B. Believed surpassed all original goals = 24%

- C. Believed achieved some of original goals = 10%
- D. Believed achieved none of original goals = 7%
- E. 63% were satisfied with level of goal achievement
- F. 37% were dissatisfied with level of goal achievement

IX. Positive Comments

- A. Encouraging faculty
- B. Positive relationships with peers
- C. Feelings of accomplishments, i.e., grades, goals

X. Negative Comments

- A. Impersonal faculty
- B. Poor counseling
- C. Poor teachers

XI. Suggestions for Helping Hispanics to Achieve Educational Goals:

- A. College staff should give more encouragement to students
- B. Increase financial aid
- C. Extend reach-out efforts to students in public schools
- D. Improve student communication skills
- E. Better counseling
- F. Help students determine career objectives
- G. Build student self-confidence

Figure 2

APPENDIX B

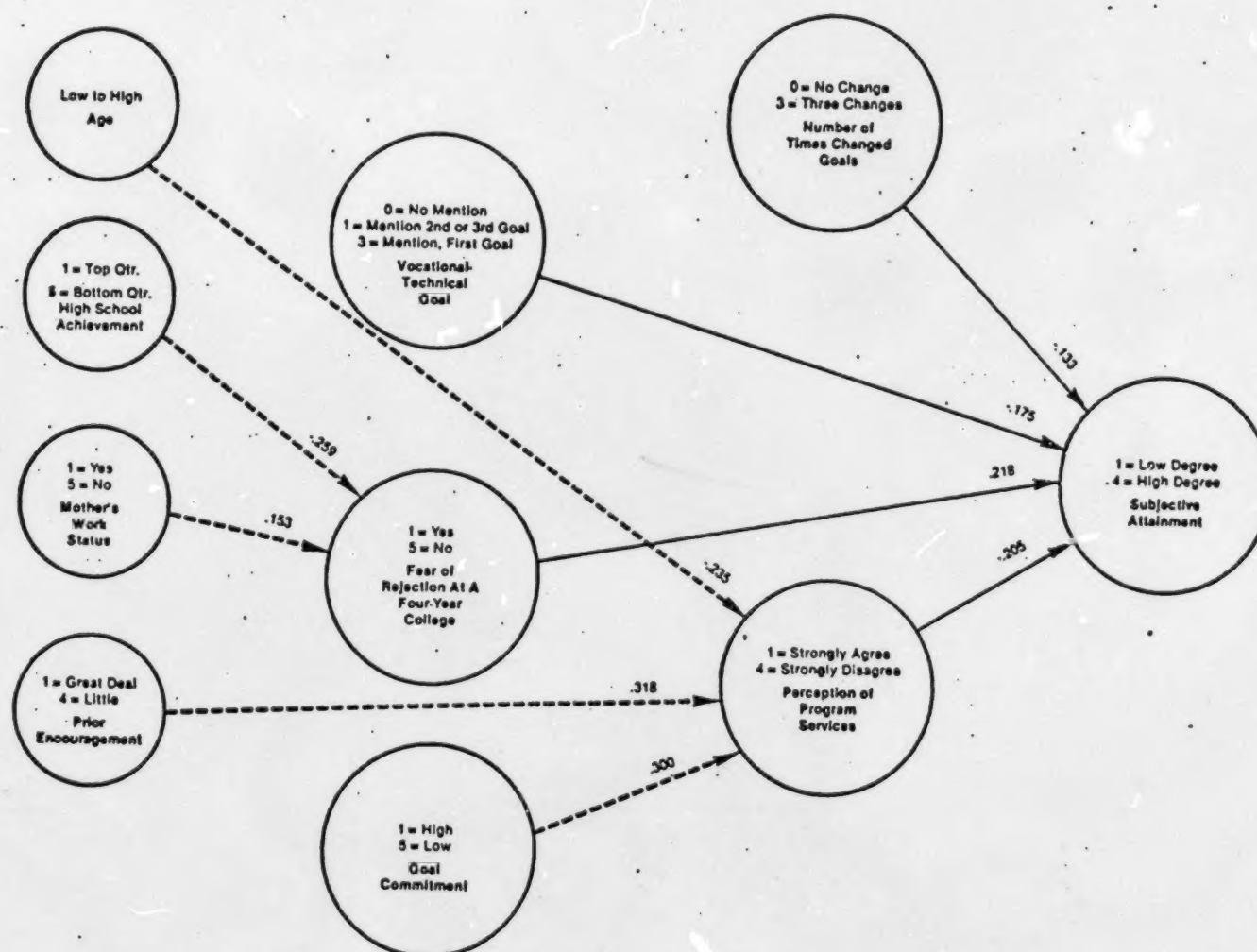
Figure 2 Revised Model of Beta Coefficients Showing Significant Direct and Indirect Effects on Subjective Attainment¹¹Indirect effects are shown on dotted line.

FIGURE 3

APPENDIX C

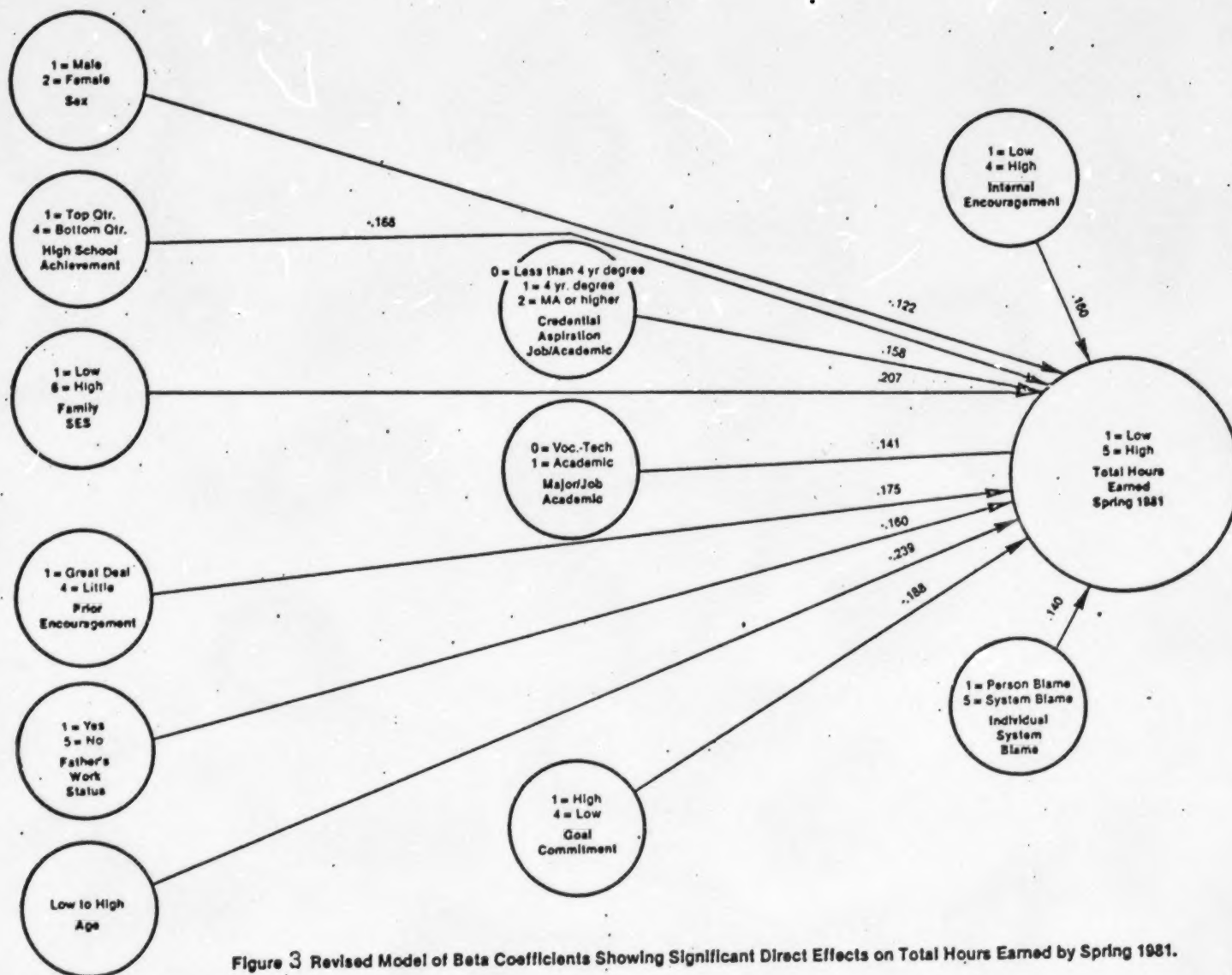


Figure 3 Revised Model of Beta Coefficients Showing Significant Direct Effects on Total Hours Earned by Spring 1981.

APPENDIX D

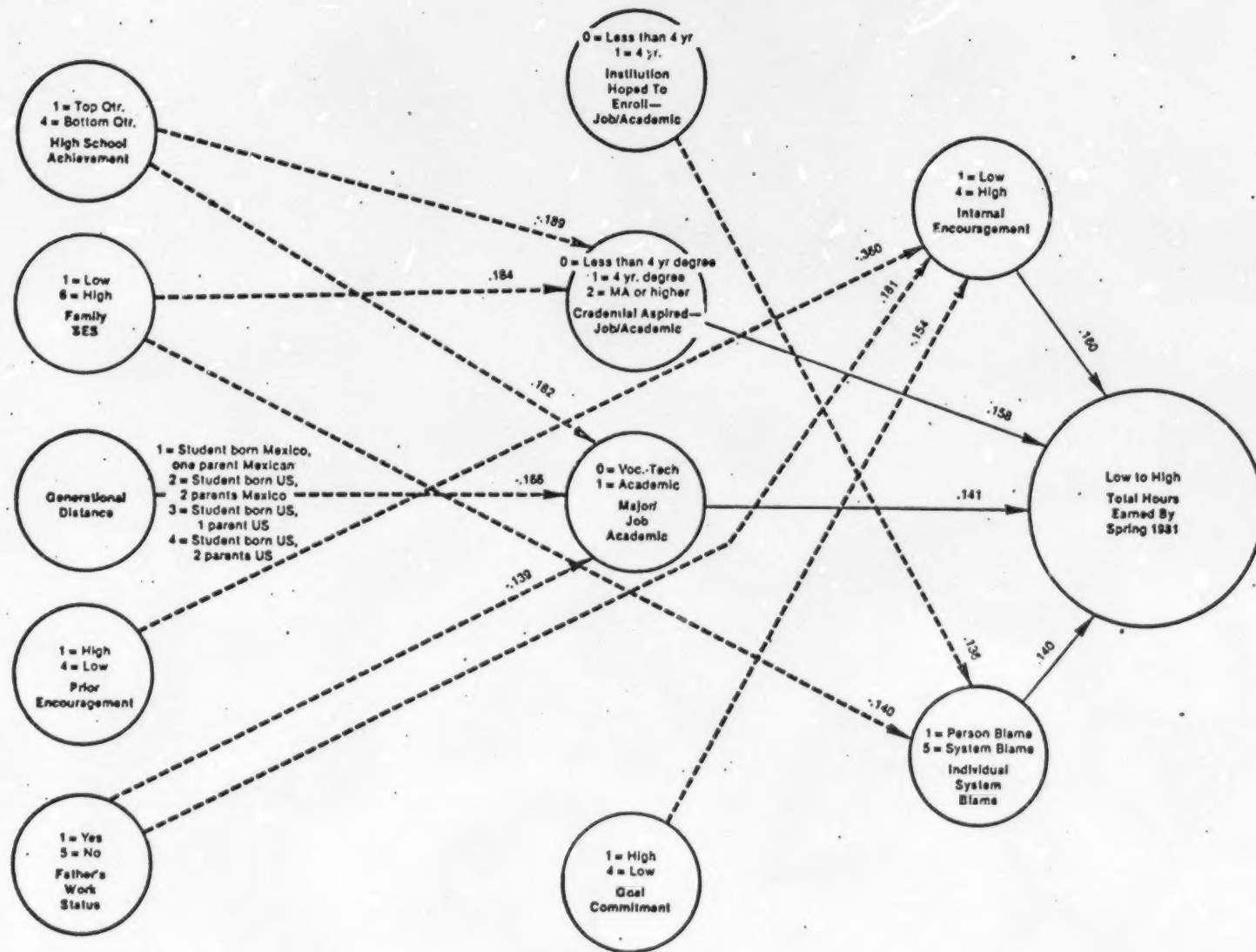


Figure 4 Revised Model of Beta Coefficients Showing Significant Indirect Effects on Total Hours Earned by Spring 1981.

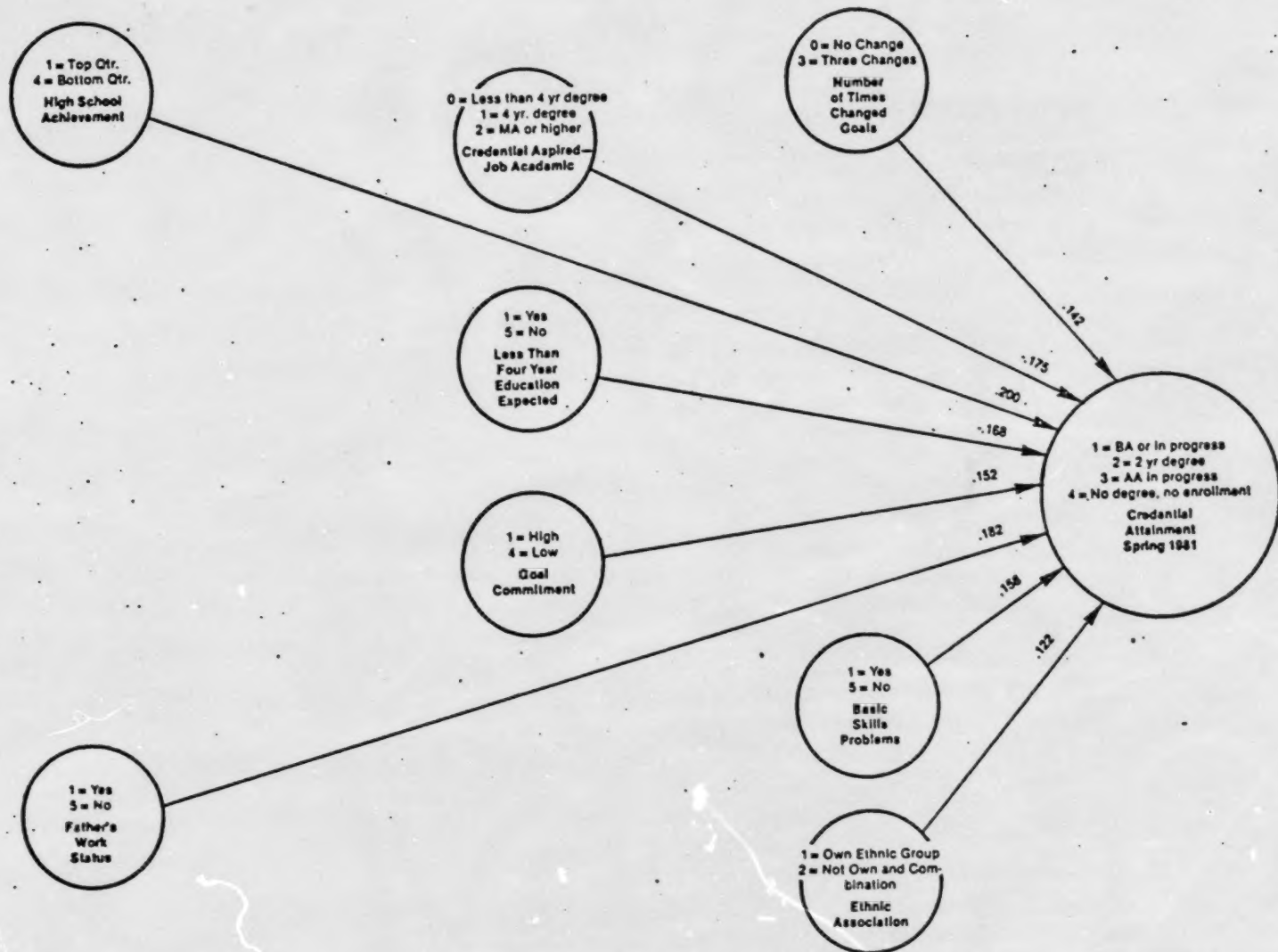


Figure 5 Revised Model of Beta Coefficients Showing Direct Effects on Credential Attainment by Spring 1981.

Figure 6

APPENDIX F

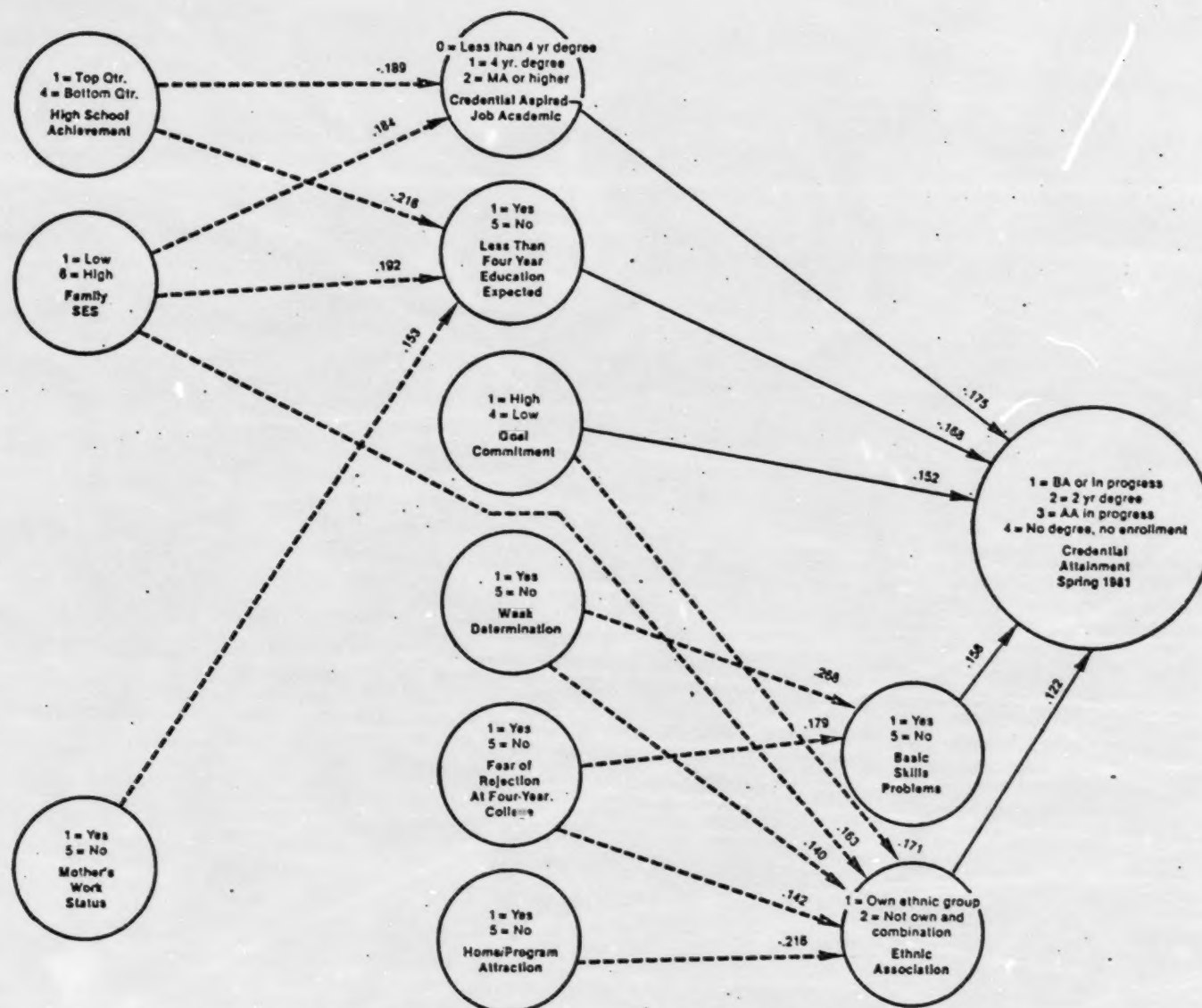


Figure 6 Revised Model of Beta Coefficients Showing Indirect Effects on Credential Attainment by Spring 1981.

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